

## **FIGURE 1**

GGACTAATCTGTGGGAGCAGTTATTCCAGTATCACCCAGGGTGCAGCCACACCAGGACTGT  
GTTGAAGGGTGTCCCCCTAAATGTAATACCTCCTCATCTTCTTACACAGTG  
TCTGAGAACATTTACATTATAGATAAGTAGTACATGGTGGATAACTCTACTTTAGGAGGA  
CTACTCTTCTGACAGTCCTAGACTGGTCTTCTACACTAAGACACCATGAAGGAGTATGTG  
CTCCTATTATTCTGGCTTGTGCTGCCAACCCCTCTTAGCCCTCACACATCGCACT  
GAAGAATATGATGCTGAAGGATATGGAAGACACAGATGATGATGATGATGATGATG  
ATGATGATGATGAGGACAACCTCTTTCCAACAAGAGAGCCAAGAACCCATT  
TTTGATCTGTTCCAATGTGTCCATTGGATGTCAGTGCTATTCAAGGTTGACATTGCTC  
AGATTTAGGTTGACCTCAGTCCAAACCAACATTCAATTGATACTGAATGCTGATCTC  
AAAACAATAAAATTAGGAAATCAAAGAAAATGATTTAAAGGACTCACTTCACTTATGGT  
CTGATCCTGAACAACAACAGCTAACGAAGATTACCCAAAAGCCTTCTAACACAAAGAA  
GTTGCGAAGGCTGTATCTGCCCACAATCAACTAAGTGAATACCACTTAATCTCCC  
CATTAGCAGAACTCAGAATTCAATGAAAATAAGTTAAGAAAATACAAAAGGACACATT  
GGAATGAATGCTTACACGTTGGAAATGAGTGCAAACCCCTTGTATAATGGGATAGA  
GCCAGGGCATTGAGGGTGCAGGTGTTCCATATCAGAATTGCGAGAACAACTGACCT  
CAGTTCTAAAGGCTTACCAACTTATTGGAGCTCAGTATTATAAAATTCA  
ACAGTGGAACTTGAGGATTTAAACGATAACAAGAAACTACAAAGGCTGGCCTAGGAAACAA  
CAAATCACAGATATCGAAAATGGGAGTCTGCTAACATACCACGTGAGAGAAATACATT  
TGGAAAACAATAAACTAAAAAAATCCCTCAGGATTACCAAGAGTTGAAATACCTCCAGATA  
ATCTTCCTCATTCTAATTCAATTGCAAGAGTGGAGTAAATGACTCTGTCCAACAGTGCC  
AAAGATGAAGAAATCTTATACAGTGAATAAGTTATTCAACAAACCGGTGAAATACTGGG  
AAATGCAACCTGCAACATTGTTGTTGAGCAGAATGAGTGTTCAGCTGGAAACTT  
GGAATGTAATAATTAGTAATTGTAATGTCATTAAATATAAGATTCAAAATCC  
TGGAAACTTGAACCTATTGTTGAGAGAAACAGCATCTATTGAGCTTCTTGTGAAATGAT  
CTTACATAAAATCTCATGCTGACCATTCTTCTTCATAACAAAAAGTAAGATATT  
TTAACACTTGTATCAAGCACATTAAAAGAACTGTACTGTAATGGAATGCTTGA  
TAGCAAAATTGCTCTTCATTGCTGTTAGAAAAACAGAATTAAACAAAGACAGTAATGT  
GAAGAGTGCATTACACTATTCTTATTCTTAGTAACCTGGTAGTACTGTAATATT  
CATCTTAAAGTATGATTGATATAATCTTATTGAAATTACCTTATCATGCTTAGAGCC  
CTTATGTTAAAACATTCTTAAAGCCTCAGTAAATGTTATTACCAACTTGA  
TAAATGCTACTCATAAGAGCTGGTTGGGCTATAGCATATGCTTTTTTTAATTATT  
ACCTGATTAAAATCTGTAAAAACGTAGTGTTCATAAAATCTGTAACCTGCATT  
AATGATCCGCTATTATAAGCTTTAATAGCATGAAAATTGTTAGGCTATATAACATT  
TTCAACTCTAAGGAATATTGAGATATCCCTTGGAAAGACCTGCTTGGAAAGAGCCTGGA  
CACTAACAAATTCTACACCAATTGCTCTTCAAATACGTATGGACTGGATAACTCT  
CACATCTAGTATAACTGAATAAGCAGAGCATCAAATTAAACAGACAGAAACCG  
TATAAAATGCTCAGAGTTCTTATGTATTGCTTATTGGCATTCAACATATG  
ACAGGGAAATTTCATTAAAATATTGGTTGAAAT

## **FIGURE 2**

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</usr/seqdb2/sst/DNA/Dnaseqs.min/ss.DNA34392
<subunit 1 of 1, 379 aa, 1 stop
<MW: 43302, pi: 7.30, NX(S/T): 1
MKEYVLLLFLALCSAKPFFSPSHIALKNMMLKDMEDTDDDDDDDDDDDEDNSLFPTREPR
SHFFPFDLFPMCPFGCQCYSRVVHCSDLGLTSVPTNIPFDTRMLDLQNNKIKEIKENDFKGL
TSLYGLILNNNKLTKIHPKAFLTTKLRRLYLSHNQLSEIPLNLPKSLAELRIHENKVKKIQ
KDTFKGMNALHVLEMSANPLDNNGIEPGAFEGVTVFHIRIAEAKLTSVPKGLPPTLLELHLD
YNKISTVELEDFKRYKELQRLGLGNNKITDIENGLANIPRVREIHLENNKLKKIPSGLPEL
KYLQIIIFLHSNSIARVGVNDFCPTVPKMKSLSAISLFNNPVKYWEMQPATFRCVLSRMSV
QLGNFGM
```

**Signal sequence.**

amino acids 1-15

**N-glycosylation site.**

amino acids 281-285

**N-myristoylation sites.**

amino acids 129-135, 210-216, 214-220, 237-243, 270-276, 282-288

**Leucine zipper pattern.**

amino acids 154-176

## **FIGURE 3**

CGGACGCGTGGCGGACGCGTGGGCCGCGCACCGCCCCGGCCCTCCGCCCTCGCACTCGGCCCTCC  
CTCCCTCCGCCGCTCCCGCCTCCCTCCCTCCCTCCCTCCCTCCAGCTGTCCCCTCGCGTCATGCCGAGCCTCCC  
GGCCCCGCCGCCCGCTGCTGCTCCTCGGCTGCTGCTCGCTCCGCCGGCCGGCCGCCGCCAGA  
GCCCGCCCGTGCTGCCCATCGCTCTGAGAAGGAGCCGCTGCCGTTGGGAGCGGCAGGCTGCACCTCGCG  
GAAGGTCTATGCCCTGGACGAGACGTGGCACCCGGACCTAGGGCAGCCATTGGGTGATGCCTGCGTGTG  
CGCCTGCGAGGCGCCTCAGTGGGTGCGCTACCAGGGGCCCTGGCAGGGTCAAGTCAAGAACATCAAACAGA  
GTGCCCAACCCGGCTGTGGCAGCCGCCAGCTGCCGGACACTGCTGCCAGACCTGCCAGGAGCGCAG  
CAGTCGGAGCGCAGCCGAGCCGCCAGTCCAGTATCCCGGGACCCGGAGCATCGCAGTTAGCGACCG  
CGGGGAGCCAGGCGCTGAGGAGCCGCCAGTGGTACGCCACACGGACTTCGTGGCGCTGCTGACAGGGCCGAG  
GTCGCAAGCGGTGGCACGAGCCGAGTCTCGCTGCGCTAGCCTCCGCTTCTATCTCCTACAGGCGGCT  
GGACGCCCTACCGATCCGCTCTCAGACTCCAATGGCAGTGTCTGTTGAGCACCTGCAGCCCCACCCA  
AGATGGCCTGGTCTGTTGGGTGAGGCCAGTGCCTCGGTTCTGCGGCTCCTTAGGGCAGAACAGCTGCA  
TGTGGCACTTGTGACACTCACTCACCCCTCAGGGGAGGTCTGGGGCCTCTCATCCGGCACGGGCCCTGGCTG  
AGAGACCTTCAGTGCATCCTGACTCTAGAAGGCCCCCACAGCAGGGCGTAGGGGCATCACCTGCTCACTCT  
CAGTGAACACAGAGGACTCCTGATTTTGCTGCTCTTCCGAGGGCTGCTGGAACCCAGGAGTGGGGACTAAC  
CCAGGTTCCCTTGAGGCTCCAGATTCTACACCAGGGCAGCTACTGCGAGAACCTCAGGCCAATGTCTCAGCCA  
GGAACCAAGGCTTGCTGAGGTGCTGCCAACCTGACAGTCCAGGAGATGACTGGCTGGTCTGGGGAGCTGCA  
GATGGCCCTGGAGTGGCAGGCCAGGGCTGCCATCAGTGGACACATTGCTGCCAGGAAGAGCTGGCACGT  
CTGCAAAGTGTCTTGTGGGCTGATGCCCTGATCCCAGTCCAGCAGGGCTGCCAGGCCACT  
GCTGCTAGGAAATGGCTCCCTGATCTATCAGGTGCAAGTGGTAGGGACAAGCAGTGGAGTGGTGGCCATGACACT  
GGAGACCAAGCCTCAGCGGAGGGATCAGGCCACTGCTCTGTGCCACATGGCTGGACTCCAGCAGGAGGACACAC  
GGCCGTGGGTATCTGCCCTGGCTGGCGAGGGCTCATATGCTGCTGCAGAACGGTCTTCCCTGAACGT  
GGGCACCAAGGACTTCCAGACGGAGAGCTCGGGGACGTGGCTGCCCTACTGTGGCATAGGCCCG  
CCATGACACGCTGCCGTGCCCTAGCAGGAGCCCTGGTCTACCCCTGTGAAGAGCCAAGCAGCAGGGCACGC  
CTGGCTTCCCTGGATACCCACTGTCACCTGCACTATGAAGTGTGCTGGCTGGCTGGTGGCTCAGAACAGG  
CACTGTCACTGCCACCTCCTGGCCTCTGGAACGCCAGGGCTCGGGCTGCTGAAGGGATTCTATGGCTC  
AGAGGCCAGGGTGGTGAAGGACCTGGAGCCGAAGTCTGGGAGCTCCAGGGCAGGTGCAACATAGCCAACCAATGTGAGGTTGGCG  
GATCACCACCAAGGGTAGCCCCAGAGGGGAGCTCCAGGGCAGGTGCAACATAGCCAACCAATGTGAGGTTGGCG  
ACTGCCCTGGAGGCCGGCGAGGGGTGCGGGCTGGGGCTCCGATAACGCCCTGCTGCC  
TGTGGTCCTGGTCTCCGGCCCTAGGCCCGCAAACCTGGTCTGGGCGGCCAGAACCCAAACATG  
CTTCTCGAGGGGACGAGCAGCCCCACGGGCTCGCTGGGCCAACTACGACCCGCTCTGCTCACTTGAC  
CTGCCAGAGACGAACGGTGATCTGTGACCCGGTGGTGTGCCACCGCCAGCTGCCACACCCGGTGCAGGCTCC  
CGACCAGTGTGCCCTGTTGCCCTGAGAAACAAGATGTCAAGAGACTTGCAGGGCTGCCAAGGAGCCGGACCC  
AGGAGAGGGCTGCTATTTGATGGTGACCGGAGCTGGGGAGCTGGGGAGCGGGTACGGGTGGCACCCGTTGTGCC  
CTTGCTTAATTAAAGTGTGCTGTGACCTGCAAGGGGGCACTGGAGAGGTGCACTGTGAGAACGGTGCAGTG  
TCCCCGGCTGGCCTGTGCCAGCCCTGTGCTGCAACCCACCGACTGCTGCCAAACAGTGTCCAGTGGGTC  
GGCCACCCCAAGCTGGGGACCCATGCAAGGCTGATGGGCCGGCTGCCGTTTGCTGGCAGTGGTCCC  
AGAGAGTCAGAGCTGGCACCCCTCAGTCCCCCTTTGGAGAGATGAGCTGTATACCTGCAAGATGTGGGCAAG  
GGTGCCTCACTGTGAGCGGGATGACTGTTCACTGCCACTGCTCTGTGGCTGGGGAAAGGAGAGTCGATGTT  
CCGCTGCACGGCCCACCGCGGGCCCCAGAGACCAGAACTGATGCCAGAGCTGGAGAAAGAACGGCAAGGCTTTA  
GGGAGCAGCCAGAGGGCCAAGTGAACCAAGAGGATGGGCTGAGCTGGGGAGGGGTGGCATCGAGGACCTT  
GCATTCTCTGTGGGAAGGCCAGTGCCTTGTCTCTGCTCTACTCCCACCCCAACTACCTCTGGAA  
CCACAGCTCCACAAGGGGAGAGGCAGCTGGGCCAGACCGAGGTCAAGGCCACTCCAAGTCTGCC  
TCGGCCTCTGTCTGGAAAGCCCCACCCCTTCTCTGTACATAATGTCACTGGCTGTTGGATTTTAATT  
CTTCACTCAGCACCAAGGGCCCCGACACTCCACTCTGCTGCCCTGAGCTGAGCAGAGTCATTATTGGAGAG  
TTTGTATTATTAAAACATTCTTTCAAGTCAAAAAAAAAAAAAAA

## **FIGURE 4**

><subunit 1 of 1, 954 aa, 1 stop

><MW: 101960, pI: 8.21, NX(S/T): 5

MPSLPAPPAPLLLGLLLGSRPARGAGPEPPVLPIRSEKEPLPVRAAGCTFGGKVYALDE  
TWHPDLGQPFGVMRCVLCACEAPQWGRRTRGPGRVSCKNIKPECPTPACGQPRQLPGHCCQT  
CPQERSSSERQPSGLSFEYPRDPEHRSYSDRGEPGAERARGDGHTDFVALLTGPRSQAVAR  
ARVSSLRSSLRFSISYRRLDRPTRIRFSDSNGSVLFEHPAAPTQDGLVCGWRAVPRLSLRL  
LRAEQLHVALVTLTHPSGEVGPLIRHRALAAETFSAILTLEGPPQQGVGGITLLTLSDTED  
SLHFLLLFRGLLEPRSGGLTQVPLRLQILHQQLLRELQANVSAQEPGFAEVLPNLTQEMD  
WLVLGELQMALEWAGRPGRLISGHIAARKSCDVLQSVLCGADALIPVQTGAAGSASLTLLGN  
GSLIYQVQVVGTSSEVVAMTLETKPQRDQRTVLCHMAGLQPGGHTAVGICPGLGARGAHML  
LQNELFLNVGKDFPDGELRGHVAALPYCGHSARHDTPVPLAGALVPPVKSQAAGHAWLS  
LDTHCHLHYEVLLAGLGGSEQGTVTAHLLGPPGTPGPRRLLKGFYSEAQGVVKDLEPELLR  
HLAKGMASLMITTKGSPRGELRGQVHIANQCEVGLRLEAAGAEVRALGAPDTASAAPPVV  
PGLPALAPAKPGGPGRPRDPNTCFEGQQRPHGARWAPNYDPLCSLCTCQRTVICDPVVCP  
PPSCPQVQAPDQCCPVCPEKQDVRDLPGLPRS RDGEGCYFDGDRSWRAAGTRWHPVVPPF  
GLIKCAVCTCKGGTGEVHCEKVQCPRLACAQPVRVNPTDCKQCPVSGAHPQLGDPMQADG  
PRGCRFAGQWFPEQSWSHPSVPPFGEMSCITCRCGAGVPHCERDDCSLPLSCSGKESRCCS  
RCTAHRPPETRTDPELEKEAEGS

**Signal sequence.**

amino acids 1-23

**N-glycosylation sites.**

amino acids 217-221, 351-355, 365-369, 434-438

**Tyrosine kinase phosphorylation sites.**

amino acids 145-153, 778-786

**N-myristoylation sites.**

amino acids 20-26, 47-53, 50-56, 69-75, 73-79, 232-238, 236-242,  
390-396, 422-428, 473-479, 477-483, 483-489, 489-495, 573-579,  
576-582, 580-586, 635-641, 670-676, 773-779, 807-813, 871-877,  
905-911

**Amidation site.**

amino acids 87-91

**Cell attachment sequence.**

amino acids 165-168

**Leucine zipper pattern.**

amino acids 315-337

## **FIGURE 5**

GGCGGAGGCCCTAGCCGCCACCGTCGCTCTCGCAGCTCTCGTGCCTGCCACCGCCGCCGCGACTGCG  
TCTGGCTCCGGCTCCCGGCCCTCCCGGCCGGCATGCAGCCCCGCCGCGCCCAGGCGCCCGGTGCGCAGCTGC  
TGCCCGCGCTGGCCCTGCTGCTGCTGCTGGAGCGGGGCCCGAGGCAGCTCCCTGGCAACCCGGTGC  
CCGGCCCTTGTCTGCGCCCCGGCCGTGCGCCGGCAGCCCTGCCGAATGGGGTGTGCACTCGGCCCTG  
AGCCGGACCGCAGCACCCGGCCCCGGCAGGCCCTGGCTACAGCTGCACCTGCCCGGGATCTCGGCC  
CCAAGTGCAGCTGTTGCAAGATCCTTGCCAGCAACCCCTGTCACCATGGCAACTGCAGCAGCAGCAGCA  
GCAGCAGCGATGGCTACCTCTGCAATTGCAATGAAGGCTATGAAGGCTTCAACTGTGAACAGGCACTCCCAGTC  
TCCCAGCCACTGGCTGGACCGAATCCATGGCACCCGACAGCTTCAGCCTGCTACTCAGGAGCCTGACA  
AAATCCTGCCCTCGCTCTCAGGCAACGGTACACTGCCTACCTGGCAGCGAAAACAGGGCAGAAAGTGTAGAAA  
TGAAAATGGGATCAAGTGGAGGTGATCCCAGATATTGCTGTGGGAATGCCAGTTCTAACAGCTCTGGGGTGGCC  
GCCTGGTATCCTTGAAGTGCCACAGAACACCTCAGTCAGAAGATTGGCAAGATGCCACTGCCACTGATTG  
TCTGGAAGGTCAAGGCCACAGGATTCCAACAGTGCTCCCTCATAGATGGACGAAGTGTGACCCCCCTCAGGCTT  
CAGGGGGACTGGTCTCTGGAGGAGATGCTGCCCTGGGAATAATCACTTTATTGGTTTGTGAATGATTCTG  
TGACTAAGTCTATTGTCGGCTTGCGCTTAACCTGGTGGTGAAGGTACGCACCTGTGTGCCGGGGAGAGTCAGC  
CAAATGACTTGGAGTGTTCAGGAAAAGGAAAATGCACCACGAAGCCGTACAGGCAACTTTTCTGTACCTGTC  
AGGAGCAGTACGTGGGTACTTCTGTGAAGAATACGATGCTGCCAGAGGAAACCTGCCAAACACGCGAGCT  
GTATTGATGCAAATGAAAAGCAAGATGGAGCAATTTCACCTGTGTTGCCCTGGTTACTGGAGAGCTTT  
GCCAGTCCAAGATTGATTACTGCATCCTAGACCCATGCAGAAATGGAGCAACATGCATTCCAGTCTCAGTGGAT  
TCACCTGCCAGTGTCCAGAAGGATACTTCGGATCTGCTTGAGAAAAGGTGGACCCCTGCGCCTGCTCCGT  
GCCAGAACAACGGCACCTGCTATGTGGACGGGTACACTTACCTGCAACTGCAGCCGGCTTCACAGGGCCGA  
CCTGTGCCAGCTTATTGACTTCTGTGCCCTCAGCCCTGTGCTCATGGCACGTGCCAGCGTGGGACCAGCT  
ACAATGCCCTGTGATCCAGGTTACCATGGCTCTACTGTGAGGGAGGAATAATGAGTGCCTCTCCGCTCCAT  
GCCCTGAATGCAGGCCACCTGCAGGGACCTGTTAATGGCTATGAGTGTGTCGCCCTGGCAGAAATACAAGGAACAC  
ACTGTGAATTGTACAAGGATCCCTGCGCTAACGTCAGCTGTGAACGGAGCCACCTGTGACAGCGACGGCTGA  
ATGGCACGTGCATCTGTGCACTGGGTTACAGGTGAAGAGTGCACATTGACATAATGAATGTGACAGTAACC  
CCTGCCACCATGGTGGGAGCTGCCCTGGACCCAGCCAATGGTTATAACTGCCACTGCCCATGGTTGGTGGAG  
CAAACTGTGAGATCCACCTCAATGGAAGTCCGGCACATGGCGAGAGCCTACCAACATGCCACGGACTCCC  
TCTACATCATCATTGGAGCCCTTGCGTGGCTTCATCCTTATGCTGATCATCTGATCGTGGGATTGCCGCA  
TCAGCCGATTGAATACCAGGGTTCTCCAGGCCAGCCTATGAGGAGTCTACAACGTGCCAGCATCGACAGCG  
AGTTCAAGCAATGCCATTGCACTCCATCCGGATGCCAGGTTGGAAAGAAATCCGGCTGCAATGTATGATGTGA  
GCCCATCGCCTATGAAGATTACAGTCTGATGACAAACCTGGTACACTGATTAAAACAAAGATTGTAAT  
CTTTTTGGATTATTTCAAAAGATGAGATACTACACTCATTAAATATTTAAGAAAATAAAAGCTTAA  
GAAATTAAAATGCTAGCTGCTCAAGAGTTTCAGTAGAAATTTAAGAACTAATTCTGAGCTTTAGTTG  
AAAAAAATTTAAAAACAAATTGTGAAACCTATAGACGATTTAATGTACCTTCAGCTCTAAACTGT  
GTGCTTCACTAGTGTGCTTTCACTGTAGACACTATCACGAGACCCAGATTAATTCTGTTGTTACA  
GAATAAGTCTAATCAAGGAGAAGTTCTGTTGACGTTGAGTGCCTTCTGAGTAGAGTTAGGAAACAC  
GTAACGTAGCATATGATGTATAATAGAGTATACCGTTACTTAAAGAAGTCTGAAATGTTGTTGTGAA  
AGAAAATAGTTAAATTACTATTCTAACCGAATGAAATTAGCCTTGCCTTCTGTCATGGGTAAGTAAC  
TTATTCTGCACTGTTGTGAACTTGTGGAAACATTCTTCGAGTTGTTTGTCAATTCTGTAACAGTCG  
TCGAACTAGGCCTCAAAACATACGTAACGAAAGGCCAGCGAGGCAAATTCTGATTGATTGAATCTATATT  
TTCTTAAAAAGTCAAGGGTTCTATATTGTGAGTAAATTACATTGAGTTGTTGCTAAGAGGTTAG  
TAAATGTAAGAGAGTACTGGTTCTTCAGTAGTGTGAGTATTCTCATAGTGCAGCTTATTATCTCCAGGATGTT  
TTTGTGGCTGTATTGATTGATATGTGCTTCTGATTCTGCTAATTCCAACCATATTGAATAATGTGATC  
AAAGTCA

## **FIGURE 6**

><subunit 1 of 1, 737 aa, 1 stop

><MW: 78475, pI: 5.09, NX(S/T): 11

MQPRRAQAPGAQQLPALLLLLLGGAGPRGSSLANPVPAAPLSAPGPCAAQPCRNGGVCTSR  
PEPDHQHAPAPAGEPGYSCTCPAGISGANCQLVADPCASNPCHHNCSSSSSSDGYLCICN  
EGYEGPNCEQALPSLPATGWTESMAPRQLQPVPATQEPDKILPRSQATVTLPTWQPKTGQKV  
VEMKWDQVEVIPDIACGNASSNSSAGGRLVSFEVPQNTSVKIRQDATASLILLWKVTATGFQ  
QCSLIDGRSVTPLQASGGVLLEEMLALGNNHFIFGVNDSVTKSIVALRTLTVVKVSTCVPG  
ESHANDLECSGKGKCTKPSEATFSCTCEEQYVGTCEEYDACQRKPCQNNASCIDANEKQD  
GSNFTCVCLPGYTGEELCQSKIDYCILDPCRNGATCISSLSGFTCQCPEGYFGSACEEKVDPC  
ASSPCQNNGTCYVDGVHFTCNCSPGFTGPTCAQLIDFCALSPCAHGTCRSVGTSYKCLCDPG  
YHGLYCEEYNECLSAPCLNAATCRDLVNGYECVCLAELYKDPCANVSCLNGATC  
DSDGLNGTCICAPGFTGEEDIDINECDSNPCHGGSCLDQPNGYNCHCPHWVGANCEIHL  
QWKSGHMAESLTNMPRHSLYIIIGALCVAFILMLIILIVGICRISRIEYQGSSRPAYEEFYN  
CRSIDSEFSNAIASIRHARFGKKSRPAMYDVSPIAYEDYSPDDKPLVTLIKTKDL

**Signal sequence.**

amino acids 1-28

**Transmembrane domain.**

amino acids 641-660

**N-glycosylation sites.**

amino acids 107-111, 204-208, 208-212, 223-227, 286-290, 361-365,  
375-379, 442-446, 549-553, 564-568

**Glycosaminoglycan attachment site.**

amino acids 320-324

**Tyrosine kinase phosphorylation sites.**

amino acids 490-498, 674-682

**N-myristoylation sites.**

amino acids 30-36, 56-62, 57-63, 85-91, 106-112, 203-209,  
373-379, 449-455, 480-486, 562-568, 565-571

**Amidation site.**

amino acids 702-706

**Aspartic acid and asparagine hydroxylation site.**

amino acids 520-532, 596-608

**EGF-like domain cysteine pattern signatures.**

amino acids 80-92, 121-133, 336-348, 378-390, 416-428, 454-466,  
491-503, 529-541, 567-579, 605-617

## **FIGURE 7**

CTCTGGAAGGTACGGCCACAGGATTCCAACAGTGCTCCCTCATAGATGGACGAAAGTGTGA  
CCCCCCTTCAGGCTTCAGGGGGACTGGTCCTGGAGGAGATGCTCGCCTGGGAATA  
ATCACTTATTGGTTTGTGAATGATTCTGTGACTAAGTCTATTGTGGCTTGCCTTAAC  
CTGGTGGTGAAGGTACGCACCTGTGTGCCGGGGAGAGTCACGCAAATGACTGGAGTGTTC  
AGGAAAAGGAAAATGCACCACGAAGCCGTACAGAGCAACTTTCTGTACCTGTGAGGAGC  
AGTACGTGGTACTTCTGTGAAGAATACGATGCTGCCAGAGGAAACCTGCCAAAACAAC  
GCGAGCTGTATTGATGCAAATGAAAAGCAAGATGGGAGCAATTACCTGTGTTGCCTTCC  
TGGTTATACTGGAGAGCTTGCCAACCGAACTGAGATTGGAGCGAACGACCTACACCGAACT  
GAGATAGGGGAG

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## **FIGURE 8**

CTCTGGAAGGTACGGCCACAGGATTCCAACAGTGCTCCCTCATAGATGGACGAAAGTGTGA  
CCCCCCTTCAGGCTTCAGGGGACTGGTCCTCCTGGAGGAGATGCTCGCCTGGGAATA  
ATCACTTATTGGTTTGTGAATGATTCTGTGACTAAGTCTATTGTGGCTTGCGCTTAAC  
CTGGTGGTGAAGGTACGCACCTGTGTGCCGGGGAGAGTCACGCAAATGACTGGAGTGTTC  
AGGAAAAGGAAAATGCACCACGAAGCCGTACAGAGGAACTTTCTGTACCTGTGAGGAGC  
AGTACGTGGTACTTCTGTGAAGAACGATGCTGCCAGAGGAAACCTGCCAAACAAAC  
GCGAGCTGTATTGATGCAAATGAAAAGCAAGATGGGAGCAATTCACCTGTGTTGCCTCC  
TGGTTATACTGGAGAGCTTGCCAACCGAACTGAGATTGGAGCGAACGACCTACACCGAACT  
GAGATAGGGAG

## **FIGURE 9**

GCTGAGTCTGCTGCTCCTGCTGCTGCTCCAGCCTGTAACCTGTGCCTACACCACGCCAG  
GCCCCCCCAGAGCCCTACACCACGCTGGCGCCCCAGAGCCCACACC**ATG**CCGGGCACCTAC  
GCTCCCTCGACCACACTCAGTAGTCCCAGCACCCAGGGCCTGCAAGAGCAGGCACGGCCCT  
GATGCGGGACTTCCCCTCGTGGACGGCCACAACGACCTGCCCCTGGCTTAAGGCAGGTTT  
ACCAGAAAGGGCTACAGGATGTTAACCTGCGCAATTTCAGCTACGCCAGACCAGCCTGGAC  
AGGCTTAGAGATGCCCTCGTGGCGCCAGTTCTGGTCAGCCTATGCCATGCCAGACCCA  
GGACCGGGATGCCCTCGCCTCACCCCTGGAGCAGATTGACCTCATGCCGATGTGTGCCT  
CCTATTCTGAGCTGGAGCTTGACCTCGCTAAAGCTCTGAACGACACTCAGAAATTGGCC  
TGCCTCATCGGTAGAGGGTGGCCACTCGCTGGACAATAGCCTCTCCATCTTACGTACCTT  
CTACATGCTGGAGTGCCTACCTGACGCTACCCACACCTGCAACACACCCCTGGCAGAGA  
GCTCCGCTAAGGGGTCCACTCCTCTACAACAAACATCAGCGGGCTGACTGACTTTGGTAG  
AAGGTGGTGGCAGAAATGAACCGCCTGGCATGATGGTAGACTTATCCATGTCTCAGATGC  
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GGGGTGTGTGCAACAGTGCTCGGAATGTTCTGATGACATCCTGAGCTTCTGAAGAAGAAC  
GGTGGCGTCGTGATGGTGTCTTGCCATGGAGTAATAACAGTCAACCCATCAGCCAATGT  
GTCCACTGTGGCAGATCACTCGACCACATCAAGGCTGTCATTGGATCCAAGTTCATGGGA  
TTGGTGGAGATTATGATGGGCCGGCAAATTCCCTCAGGGCTGGAAGACGTGTCCACATAC  
CCGGTCCTGATAGAGGAGTTGCTGAGTCGTGGCTGGAGTGAGGAAGAGCTTCAGGGTGTCC  
TCGTGGAAACCTGCTCGGGCTTCAGACAAGTGGAAAAGGTACAGGAAGAAAACAAATGGC  
AAAGCCCCCTGGAGGACAAGTCCGGATGAGCAGCTGAGCAGTTCTGCCACTCCGACCTC  
TCACGTCTCGCTCAGAGACAGAGTCTGACTTCAGGCCAGGAACACTGAGATTCCATACA  
CTGGACAGCCAAGTTACCAAGCCAAGTGGTCAGTCTCAGAGTCCTCCCCCAGATGGCCCCAG  
TCCTTGAGTTGTGGCACCTTCCCAGTCCTTATTCTGTGGCT**TGAT**GACCCAGTTAGTCC  
TGCCAGATGTCACTGTAGCAAGCCACAGACACCCACAAAGTTCCCTGTTGTGCAGGCACA  
AATATTCTGAAATAATGTTGGACATAG

## **FIGURE 10**

```
</usr/seqdb2/sst/DNA/Dnaseqs.min/ss.DNA35595  
<subunit 1 of 1, 433 aa, 1 stop  
<MW: 47787, PI: 6.11, NX(S/T): 5  
MPGTYAPSTTLSSPSTQGLQEQRALMRDFPLVDGHNDLPLVLRQVYQKGLQDVNLRNFSYG  
QTSLDRLRDGLVGAQFWSAYVPCQTQDRDALRLTLEQIDLIRRMCAASYSELELVTSAKALND  
TQKLACLIGVEGGHSLDNSLSILRTFYMLGVRYLTHTCNPWAESSAKGVHSFYNNISGL  
TDFGEKVVAEMNRLGMMVDSLHVSDAVARRALEVSQAPVIFSHSAARGVCNSARNVPDDILQ  
LLKKNGGVMVSLSMGVIQCNPSANVSTVADHFDHIKAVIGSKFIGIGGYDGAGKFPQGLE  
DVSTYPVLIIEELLSRGWSEEELQGVLRGNLLRVFRQVEKVQEENKWQSPLEDKFPDEQLSSS  
CHSDLRQLRQSLTSGQELTEIPIHWTAKLPAKWSVSESSPHMAPVLAFFPVVLILWL
```

**N-glycosylation sites.**

amino acids 58-62, 123-127, 182-186, 273-277

**N-myristoylation sites.**

amino acids 72-78, 133-139, 234-240, 264-270, 334-340, 389-395

**Renal dipeptidase active site.**

amino acids 134-157

## **FIGURE 11**

AAAACCTATAATATTCCGGATTATTCATACCGTCCCACCATGGGCGCGGATCCGCGGCCG  
CGAATTCTAAACCAACATGCCGGGCACCTACGCTCCCTCGACCACACTCAGTAGTCCCAGCA  
CCCAGGGCCTGCAAGAGCAGGCACGGGCCTGATGCGGGACTTCCGCTCGTGGACGGCCAC  
AACGACCTGCCCTGGTCCTAAGGCAGGTTACCAGAAAGGGCTACAGGATGTTAACCTGCG  
CAATTTCAGCTACGGCCAGACCAGCCTGGACAGGCTTAGAGATGGCCTCGTGGCGCCAGT  
TCTGGTCAGCCTATGTGCCATGCCAGACCCAGGACCGGGATGCCCTGCGCTCACCTGGAG  
CAGATTGACCTCATGCCGATGTGCTCCTATTCTGAGCTGGAGCTTGTGACCTCGGC  
TAAAGCTCTGAACGACACTCAGAAATTGGCCTGCCTCATCGGTGTAGAGGGTGGCCACTCGC  
TGGACAATAGCCTCTCCATCTTACGTACCTCTACATGCTGGGAGTGCCTACCTGACGCTC  
ACCCACACCTGCAACACACCCCTGGCAGAGAGCTCCGCTAAGGGCTCCACTCCTTACAA  
AACATCAGCGGGCTGACTGACTTGGTGAGAAGGTGGCAGAAATGAACCGCCTGGCA  
TGATGGTAGACTTATCCCATGTCTCAGATGCTGTGGCACGGCGGGCCCTGGAAGTGTACAG  
GCACCTGTGATCTCTCCACTCGGCTGCCGGGGTGTGCAACAGTGCCTGGAAATGTTCC  
TGATGACATCCTGCAGCTCTGAAGAAGAACGGTGGCGTCGTGATGGTGTCTTGTCCATGG  
GAGTAATAACAGTGCAACCCATCAGCCAATGTGTCCACTGTGGCAGATCACTCGACCACATC  
AAGGCTGTCATTGGATCCAAGTTCATCGGGATTGGTGGAGATTATGATGGGCCGGCAAATT  
CCCTCAGGGGCTGGAAGACGTGTCCACATACCCGGCCTGATAGAGGAGTTGCTGAGTCGTG  
GCTGGAGTGAGGAAGAGCTTCAGGGTGTCTCGTGGAAACCTGCTGGGTCTTCAGACAA  
GTGGAAAAGGTACAGGAAGAAAACAAATGGCAAAGCCCCTGGAGGACAAGTTCCCGATGA  
GCAGCTGAGCAGTCCCTGCCACTCCGACCTCTCACGTCTCGTCAGAGACAGAGTCTGACTT  
CAGGCCAGGAACACTCACTGAGATTCCCACACTGGACAGCCAAGTTACCAGCCAAGTGGTCA  
GTCTCAGAGTCCTCCCCCACCCTGACAAAACTCACACATGCCACCGTGCCAGCACCTGA  
ACTCCTGGGGGACCGTCAGTCTTCCCTTCCCCCAAAACCCAAGGACACC

## **FIGURE 12**

```
></usr/seqdb2/sst/DNA/Dnaseqs.full/ss.DNA35872
><subunit 1 of 1, 446 aa, 0 stop
><NX(S/T): 5
MPGTYAPSTTLSSPSTQGLQEQRALMRDFPLVDGHNDLPLVLRQVYQKGLQDVNLRNFSYG
QTSLDRLRDGLVGAQFWSAYVPCQTQDRDALRLTLEQIDLIRRMCASYSELELVTSAKALND
TQKLACLIGVEGGHSLDNSLSILRTFYMLGVRYLTLLHTCNPWAESSAKGVHSFYNNISGL
TDFGEKVVAEMNRLGMMVDSLHVSDAVARRALEVSQAPVIFSHSAARGVCNSARNVPDDILQ
LLKKNGGVMVSLSMGVIQCNPSANVSTVADHFDHIKAVIGSKFIGIGGDYDGAGKFPQGLE
DVSTYPVLIEELLSRGWSEEELQGVLRGNLLRVFRQVEKVQEENKWQSPLEDKFPDEQLSSS
CHSDLRSRLRQRQSLTSGQELTEIPIHWTAKLPAKWSVSESSPHDKTHTCPPCPAPELLGGP
SVFLFPPPKPKDT
```

2003-08-06 09:56:00

## **FIGURE 13**

CGCCCAGCGACGTGCGGGCGGCCTGGCCCCGCGCCCTCCCGCGCCCGGCCCTGCGTCCC CGCGCC  
CTGCGCCACCGCCGCCGAGCCGCAGCCCGCCGCCGCGCCCCCGGCAGCGCCGCCGCCATGCCC  
GCCGGCCGCCGGGGCCCCGCCGCCAATCCGCGCGGCCGCCGCGCCGTTGCTGCCCTGCT  
GCTGCTGCTCTGCGTCCTCGGGGCCGCCGAGCCGGATCAGGAGCCACACAGCTGTGATCA  
GTCCCCAGGATCCCACGCTTCTCATCGGCTCCTCCCTGCTGGCCACCTGCTCAGTGCACGGA  
GACCCACCAGGAGCCACCGCCGAGGGCCTACTGGACCCCTAACGGCGCCGCTGCC  
TGAGCTCTCCCGTGTACTCAACGCCCTCACCTGGCTCTGCCCTGGCAACCTCAATGGGT  
CCAGGCAGCGGTGGGGACAACCTCGTGTGCCACGCCGTGACGGCAGCATCCTGGCTGGC  
TCCTGCCTCTATGTTGGCCTGCCCTAGAGAAACCGTCAACATCAGCTGCTGGTCCAAGAA  
CATGAAGGACTTGACCTGCCGCTGGACGCCAGGGGCCACGGGAGACCTCCTCCACACCA  
ACTACTCCCTCAAGTACAAGCTTAGGTGGTATGCCAGGACAACACATGTGAGGAGTACCA  
ACAGTGGGGCCCCACTCCTGCCACATCCCCAAGGACCTGGCTCTTTACGCCCTATGAGAT  
CTGGGTGGAGGCCACCAACCGCCTGGCTCTGCCCTCCGATGTACTCACGCTGGATATCC  
TGGATGTGGTGACCACGGACCCCCCGCCGACGTGACGTGAGCCGGTGGCTGGAG  
GACCAGCTGAGCGTGCCTGGGTGTCGCCACCCGCCCTCAAGGATTCCCTCTTCAAGCAA  
ATACCAGATCCGCTACCGAGTGGAGGACAGTGTGGACTGGAAGGTGGACGATGTGAGCA  
ACCAGACCTCCTGCCGCTGGCCGGCTGAAACCCGGCACCGTGTACTCGTCAAGTGC  
TGCAACCCCTTGGCATCTATGGCTCCAAGAAAGCCGGATCTGGAGTGAGTGGAGCCACCC  
CACAGCCGCTCCACTCCCCGAGCTGGGGCCGGTGGCGCGAGCTCAAGCAGTCCGGCTGGCTC  
GGGGCGGAGAGCCGAGCTGGGGCCGGTGGCGCGAGCTCAAGCAGTCCGGCTGGCTC  
AAGAAGCACCGTACTGCTCCAACCTCAGCTTCCGCCCTACGACCAAGTGGCGAGCCTGGAT  
GCAGAAGTCGACAAGACCCGCAACCAGGACGAGGGATCCTGCCCTGGGCAGACGGGCA  
CGCGAGAGGTCCCTGCCAGATAAGCTGTAGGGCTCAGGCCACCCCTGCCACGTGGAGA  
CGCAGAGGCCAACCCAAACTGGGCCACCTCTGTACCCCTCACTCAGGCCACCTGAGCCAC  
CCTCAGCAGGAGCTGGGTGGCCCTGAGCTCCAACGCCATAACAGCTCTGACTCCACGT  
GAGGCCACCTTGGGTGACCCAGTGGGTGTGTGTGAGGGTTGGTTGAGTTGC  
CTAGAACCCCTGCCAGGGCTGGGGTGAGAAGGGAGTCATTACTCCCCATTACCTAGGGCC  
CCTCCAAAAGAGTCCTTAAATAATGAGCTATTAGGTGCTGTGATTGTGAAAAAAA  
AAAAAAAAAAAAAAAAAAAAAAAAAAAAACAAAAAAA

## FIGURE 14

><ss.DNA38113

><subunit 1 of 1, 422 aa, 1 stop

><MW: 46302, pI: 9.42, NX(S/T): 6

MPAGRRGPAAQSARRPPPLPLLLLLCVLGAPRAGSGAHTAVISPQDPTLLIGSSLLATCSV  
HGDPPGATAEGLYWTLNNGRRLPPELSRVLNASTLALALANLNGSRQRSGDNLVCHARDGSIL  
AGSCLYVGLPPEKPVNISCWSKNMKDLTCRTPGAHGETFLHTNYSLKRYKLRWYGQDNTCEE  
YHTVGPHSCHIPKDLALFTPYEIWVEATNRGSAVDVLTLIDILDVVTTDPPPDVHVSRVGG  
LEDQLSVRWVSPPALKDFLFQAKYQIRYRVEDSDWKVVDDVSNQTSCRLAGLKPGTVYFVQ  
VRCNPFGIYGSKKAGIWSEWSHPTAASTPRSERPGPGGGACEPRGGEPPSSGPVRRELKQFLG  
WLKKHAYCSNLSFRLYDQWRAWMQSHKTRNQDEGILPSGRRGTARGPAR

**Signal sequence.**

amino acids 1-30

**Transmembrane domain.**

amino acids 44-61

**N-glycosylation sites.**

amino acids 92-96, 104-108, 140-144, 168-172, 292-296, 382-386

**cAMP- and cGMP-dependent protein kinase phosphorylation site.**

amino acids 413-417

**N-myristoylation sites.**

amino acids 30-36, 37-43, 73-79, 121-127, 179-185, 218-224,  
300-306, 317-323, 320-326, 347-353, 355-361, 407-413

**Amidation site.**

amino acids 3-7, 79-83, 411-415

**Growth factor and cytokines receptors family signature 2.**

amino acids 325-331

## **FIGURE 15**

CCACGCGTCCGCTGGTGTAGATCGAGCAACCCTCTAAAAGCAGTTAGAGTGGTAAAAAA  
AAAAAAAAAACACACCAAACGCTCGCAGCCACAAAGGGATGAAATTCTTCTGGACATCCTC  
CTGCTTCTCCCGTTACTGATCGTCTGCTCCCTAGAGTCCTCGTGAAGCTTTTATTCCCTAA  
GAGGAGAAAATCAGTCACCGGCAGAATCGTGCTGATTACAGGAGCTGGCATGGAATTGGGA  
GACTCGACTGCCTATGAATTGCTAAACTTAAAGCAAGCTGGTCTCTGGATATAAATAAG  
CATGGACTGGAGGAAACAGCTGCCAAATGCAAGGGACTGGTGCCAAGGTCATACTTGT  
GGTAGACTGCAGCAACCGAGAAGATATTACAGCTCTGCAAAGAAGGTGAAGGCAGAAATTG  
GAGATGTTAGTATTAGTAAATAATGCTGGTAGTCTATACATCAGATTGTTGCTACA  
CAAGATCCTCAGATTGAAAAGACTTTGAAGTTAATGTACTTGCACATTCTGGACTACAAA  
GGCATTTCCTGCAATGACGAAGAATAACCAGGCCATTGTCAGTGTGGCTTCGGCAG  
CTGGACATGTCTCGTCCCCCTTACTGGCTTACTGTTCAAGCAAGTTGCTGCTGTTGGA  
TTTCATAAAACTTGACAGATGAACTGGCTGCCTACAAATAACTGGAGTCAAAACACATG  
TCTGTGTCCTAATTGTAACACTGGCTTCATCAAAATCCAAGTACAAGTTGGACCCA  
CTCTGGAACCTGAGGAAGTGGTAAACAGGCTGATGCATGGATTCTGACTGAGCAGAAGATG  
ATTTTATTCCATCTTCTATAGCTTTTAACAACATTGGAAAGGATCCTCCTGAGCGTT  
CCTGGCAGTTAAAAGAAAAACTCAGTGTAAAGTTGATGCAGTTATTGGATATAAAATGA  
AAGCGCAAAGCACCTAGTTCTGAAAACTGATTACCAAGGTTAGGTTAGTCATCTA  
ATAGTGCAGAATTAAATGTTGAACTTCTGTTTTCTAATTATCCCCATTCTCAATA  
TCATTGGAGGCTTGGCAGTCTCATTACTACCACCTGTTCTTAGC<sub>AAAAGCTGATT</sub>  
ACATATGATATAAACAGAGAAACCTTACAGGTTGACTTTAAGGAAATGAAGAAAAAGAA  
CCAAATGACTTTATTAAAATAATTCCAAGATTATTGTGGCTCACCTGAAGGCTTGCAA  
AATTGTACCATAACCGTTATTAAACATATATTATTATTGATTGACTAAATTGTTG  
ATAATTGTTCTTCTTCTGTTCTACATAAAATCAGAAACTCAAGCTCTAAATAAAA  
TGAAGGACTATCTAGGGTATTCACAATGAATATCATGAACTCTCAATGGTAGGTTTC  
ATCCTACCCATTGCCACTCTGTTCTGAGAGATAACCTCACATTCCAATGCCAAACATTCT  
GCACAGGGAAGCTAGAGGTGGATACACGTGTTGCAAGTATAAAAGCATCACTGGATTAA  
GAGAATTGAGAGAATGTACCCACAAATGGCAGCAATAATAATGGATCACACTTAA  
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA  
AAAAAAAAAAAAAAAAAAAAAAAAAAAA

## **FIGURE 16**

</usr/seqdb2/sst/DNA/Dnaseqs.full/ss.DNA34436

<subunit 1 of 1, 300 aa, 1 stop

<MW: 32964, PI: 9.52, NX(S/T): 1

MKFLLDILLPLLIVCSLESFVKLFIPKRRKSVTGEIVLITGAGHIGRLTAYEFAKLKSK  
LVLWDINKHGLEETAAKCKGLGAKVHTFVVDCSNREDIYSSAKKVAEIGDVSILVNNAGVV  
YTSDLFATQDPQIEKTFEVNVLAHFWTTKAFLPAMTKNNHGHIVTVASAAGHVSVFLLAYC  
SSKFAAVGFHKTLTDELAALQITGVKTTCLCPNFVNTGFIKNPSTSLGPTLEPEEVVNRLMH  
GILTEQKMIFIPSSIAFLTTLERILPERFLAVLKRKISVKFDAVIGYKMKAQ

**Signal sequence.**

amino acids 1-19

**Transmembrane domain.**

amino acids 170-187

**cAMP- and cGMP-dependent protein kinase phosphorylation sites.**

amino acids 30-34, 283-287

**N-myristylation sites.**

amino acids 43-49, 72-78, 122-128, 210-216

## **FIGURE 17**

GAAGTCTCTGGAGTCTGGAGGAGGAAAGCGGAGCCGGCAGGGAGCGAACCAAGGACTG  
GGGTGACGGCAGGGCAGGGGGCGCTGGCCGGGAGAAGCGCGGGGCTGGAGCACCAAA  
CTGGAGGGTCCGGAGTAGCGAGCGCCCCGAAGGAGGCCATCGGGAGCCGGAGGGGGACT  
GCGAGAGGACCCCGCGTCCGGCTCCCGGTGCCAGCGCTATGAGGCCACTCCTCGTCTGC  
TGCTCCTGGCCTGGCGGGCTCGCCCCACTGGACGACAACAAGATCCCAGCCTCTGC  
CCGGGGCACCCGGCCTTCCAGGCACGCCGGCCACCATGGCAGCCAGGGCTGCCGGCG  
CGATGGCCCGACGGCCCGACGGCGCCGGCTCCGGGAGAGAAAGGCGAGGGCGGG  
GCCGGGACTGCCGGGACCTCGAGGGGACCCGGCCGCGAGGAGAGGCCGGACCCGCGGG  
CCCACCGGGCTGCCGGGAGTGCTCGGTGCCTCCCGATCCGCCTCAGGCCAAGCGCTC  
CGAGAGCCGGTGCCTCCCGTCTGACGCACCCCTGCCCTCGACCGCGTGGTGAACG  
AGCAGGGACATTACGACGCCGTACCGCAAGTTCACCTGCCAGGTGCCTGGGTCTACTAC  
TTCGCCGTCCATGCCACCGTCTACCGGCCAGCCTGCAGTTGATCTGGTAAGAATGGCGA  
ATCCATTGCCCTTTCTTCCAGTTTCGGGGGTGGCCAAGGCCAGCCTCGCTCTGGGG  
GGGCATGGTGAGGCTGGAGCCTGAGGACCAAGTGTGGGTGCAGGTGGTGTGGTGAAC  
ATTGGCATCTATGCCAGCATCAAGACAGACAGCACCTCTCCGGATTCTGGTACTCCGA  
CTGGCACAGCTCCCCAGTCTTGCTTAGTGCCCAGTCAGCAAAGTGAGCTATGCTCTCACTCC  
TAGAAGGAGGGTGTGAGGCTGACAACCAGGTATCCAGGAGGGCTGGCCCCCTGGAATATT  
GTGAATGACTAGGGAGGTGGGTAGAGCACTCTCCGTCTGCTGGCAAGGAATGGAAC  
AGTGGCTGTCTGCAGGTCTGGCAGCATGGGCAGTGCTGGATTTCTGCCAAGACCA  
GAGGAGTGTGCTGTGCTGGCAAGTGTAAAGTCCCCAGTTGCTCTGGCCAGGAGCCCACGGT  
GGGGTGCTCTTCCCTGGCCTCTGCTCTGGATCCTCCCCACCCCTGCTCCTGG  
GCCGGCCCTTTCTCAGAGATCACTCAATAAACCTAAGAACCTCATAAAAAAAAAAAA  
AAAAAAAAAAAAA

## **FIGURE 18**

></usr/seqdb2/sst/DNA/Dnaseqs.min/ss.DNA40592

><subunit 1 of 1, 243 aa, 1 stop

><MW: 25298, pI: 6.44, NX(S/T): 0

MRPLLVLLLLGLAAGSPPPLDDNKPSSLCPGHPGLPGTPGHGSQGLPGRDGRDGRDGAPGAP  
GEKGEGRGPGLPGPRGDPGPRGEAGPAGPTGPAGECSVPPRSAFSAKRSESRVPPPSDAPLP  
FDRV LVNEQGHYDAVTGKFTCQVPGVYYFAVHATVYRASLQFDLVKNGESIASFFQFFGGWP  
KPASLSGGAMVRLEPEDQWVQVGVDYIGIYASI KTDSTFSGFLVYSDWHSSPVFA

**Signal sequence.**

amino acids 1-15

**N-myristoylation sites.**

amino acids 11-17, 68-74, 216-222

**Cell attachment sequence.**

amino acids 77-80

09041112 2 2004

## **FIGURE 19**

CTCTTTGTCCACCAGCCCAGCCTGACTCCTGGAGATTGTGAATAGCTCCATCCAGCCTGAG  
AAACAAGCCGGTGGCTGAGCCAGGCTGTGCACGGAGCACCTGACGGGCCAACAGACCCAT  
GCTGCATCCAGAGACCTCCCCTGGCCGGGGCATCTCCTGGCTGTGCTCCTGGCCCTCCTG  
GCACCACCTGGCAGAGGTGTGGCCACCCCAGCTGCAGGAGCAGGCTCCGATGGCCGGAGCC  
CTGAACAGGAAGGAGAGTTCTTGCCTCCCTGCACAACCGCCTGCGCAGCTGGTCCA  
GCCCCCTGCGGCTGACATGCGGAGGCTGGACTGGAGTGACAGCCTGGCCAACTGGCTCAAG  
CCAGGGCAGCCCTCTGTGAATCCCAACCCGAGCCTGGCATCCGGCTGTGGCGCACCCCTG  
CAAGTGGGCTGGAACATGCAGCTGCTGCCCGGGCTTGGCGTCCTTGTGAAGTGGTCAG  
CCTATGGTTGCAGAGGGCAGCGGTACAGCCACGCGCAGGAGAGTGTGCTCGCAACGCCA  
CCTGCACCCACTACACGCAGCTCGTGTGGCCACCTCAAGCCAGCTGGCTGTGGCGGCAC  
CTGTGCTCTGCAGGCCAGACAGCGATAGAACGCTTGTCTGCTACTCCCCGGAGGCAA  
CTGGGAGGTCAACGGGAAGACAATCATCCCTATAAGAAGGGTGCCTGGTGTGCTCTGCA  
CAGCCAGTGTCTCAGGCTGCTCAAAGCCTGGACCATGCAGGGGGCTGTGAGGTCCCC  
AGGAATCCTTGTGCGATGAGCTGCCAGAACCATGGACGTCTAACATCAGCACCTGCCACTG  
CCACTGTCCCCCTGGCTACACGGCAGATACTGCCAAGTGAGGTGCAGCCTGCAGTGTGTC  
ACGGCCGGTTCCGGGAGGAGGTGCTCGTGTGACATCGCTACGGGAGGCCAG  
TGTGCCACCAAGGTGCATTTCCCTCCACACCTGTGACCTGAGGATCGACGGAGACTGCTT  
CATGGTGTCTTCAGAGGCAGACACCTATTACAGAGCCAGGATGAAATGTCAGAGGAAAGGCG  
GGGTGCTGGCCCAGATCAAGAGCCAGAAAGTGCAGGACATCCTGCCCTATCTGGCCGC  
CTGGAGACCACCAACGAGGTGACTGACAGTGACTTCGAGACCAGGAACCTCTGGATGGGCT  
CACCTACAAGACCAGCAAGGACTCCTCCGCTGGGCCACAGGGAGCACCAGGCCCTCACCA  
GTTTGCCCTTGGCAGCCTGACAACCACGGCTGGTGTGGCTGAGTGCTGCCATGGGTTT  
GGCAACTGCGTGGAGCTGCAGGCTTCAGCTGCCCTCAACTGGAACGACCAGCGCTGCAAAAC  
CCGAAACCGTTACATCTGCCAGTTGCCAGGAGCACATCTCCGGTGGGCCAGGGCCT  
GAGGCCTGACCACATGGCTCCCTGCCCTGGGAGCAGGCTCTGCTTACCTGTCTGC  
CCACCTGTCTGGAACAAGGGCAGGTTAAGACCACATGCCCTATGTCAAAGAGGTCTCAGA  
CCTTGCACAATGCCAGAAGTTGGGAGAGAGAGGGCAGGGAGGCCAGTGAGGGCCAGGGAGTG  
AGTGTAGAAGAAGCTGGGCCCTCGCCTGCTTTGATTGGGAAGATGGCCTCAATTAGA  
TGGCGAAGGAGAGGACACCGCCAGTGGTCAAAAAGGCTGCTCTTCCACCTGGCCAGAC  
CCTGTGGGCAGCGGAGCTCCCTGTGGCATGAACCCACGGGTATTAAATTATGAATCAG  
CTGAAAAAAAAAAAAAA

## **FIGURE 20**

</usr/seqdb2/sst/DNA/Dnaseqs.min/ss.DNA44176

<subunit 1 of 1, 455 aa, 1 stop

<MW: 50478, PI: 8.44, NX(S/T): 2

MLHPETSPGRGHLLAVLLALLGTTWAEVWPPQLQEQQAPMAGALNRKESFLLLHNRSLRSWV  
QPPAADMRRLDWSDSLQAQARAALCGIPTPSLASGLWRTLQVGWNMQLLPAGLASFVEVV  
SLWFAEGQRYSHAAGECARNATCTHYTQLVWATSSQLGCRHLCAGQTAIEAFVCAYSPGG  
NWEVNGKTIIPYKKGAWSLCTASVSGCFKAWDHAGGLCEVPRNPCRMSQNHGRLNISTCH  
CHCPCPGYTGRYCQVRCSLQCVHGRFREEECSCVCDIGYGGAAQCATKVHFPFHTCDLRIDGDC  
FMVSSEADTYYRARMKCQRKGVLAQIKSQKVQDILAFYLGRLETTNEVTDSDFETRNFWIG  
LTYKTAKDSFRWATGEHQAFTSFAFGQPDNHGLVWLSAAMFGNCVELQASAAFNWNDQRCK  
TRNRYICQFAQEHISRWPGBS

**Signal sequence.**

amino acids 1-26

**Transmembrane domain.**

amino acids 110-124

**N-glycosylation sites.**

amino acids 144-148, 243-247

**cAMP- and cGMP-dependent protein kinase phosphorylation site.**

amino acids 45-49

**N-myristoylation sites.**

amino acids 22-28, 99-105, 131-137, 201-207, 213-219, 287-293,  
288-294, 331-337, 398-404

**Prokaryotic membrane lipoprotein lipid attachment site.**

amino acids 204-215

**EGF-like domain cysteine pattern signature.**

amino acids 249-261, 280-292

**C-type lectin domain signature.**

amino acids 417-442

## **FIGURE 21**

CGGACGCGTGGGCTGGCGCTGCAAAGCGTGTCCGCCGGTCCCCGAGCGTCCCAGC  
CGCCCCGCC**ATG**CCTGCTGCTGGGCTGTGCCTGGGCTGTCCCTGTGTGGGTCGCA  
GGAAGAGGCCAGAGCTGGGCCACTCTTCGGAGCAGGATGGACTCAGGGTCCGAGGCAAG  
TCAGACTGTTGCAGAGGCTGAAAACCAACCTTGATGACAGAATTCTCAGTGAAGTCTACC  
ATCATTCCCGTTATGCCTCACTACGGTTCTGCAGAATGCTGAACAGAGCTTCTGAAGA  
CCAGGACATTGAGTTCCAGATGCAGATTCCAGCTGCAGCTTCATCACCAACTTCACTATGC  
TTATTGGAGACAAGGTGTATCAGGGCGAAATTACAGAGAGAAAAGAAGAGTGGTGTAGG  
GTAAAAGAGAAAAGGAATAAAACACAGAAGAAAATGGAGAGAAGGGACTGAAATATTCAG  
AGCTTCTGCAGTGATTCCCAGCAAGGACAAGGCCCTTTCTGAGTTATGAGGAGCTC  
TGCAGAGGCCCTGGCAAGTACGAGCACAGCATCAGCTGCCGCCAGCAGCTGCC  
AGGCTGAGCGTGGACGTGAATATCCTGGAGAGCGCGGGCATCGATCCCTGGAGGTGCTGCC  
GCTTCACAAACAGCAGGCAGAGGGCAGTGGCGCGGGAAAGATGATTCTGGCCCTCCCCAT  
CTACTGTCATTAACCAAAATGAAACATTGCCAACATAATTAAACCTACTGTAGTACAA  
CAAGCCAGGATTGCCAGAAATGAAATTGGAGACTTTATCATTAGATATGACGTCAATAG  
AGAACAGAGCATTGGGACATCCAGGTTCTAAATGGCTATTGTGCACTACTTGCTCCTA  
AAGACCTCCTCCTTACCCAAAGAATGTGGTATTGTGCTTGACAGCAGTGCTTCTATGGT  
GGAACCAAACCTCCGGCAGACCAAGGATGCCCTCTCACAAATTCTCATGACCTCCGACCCCA  
GGACCGTTTCAGTATCATTGGATTTCACCGGATCAAAGTATGGAAGGACCACTTGATAT  
CAGTCACTCCAGACAGCATCAGGGATGGAAAGTGTACATTACCATATGTCACCCACTGGA  
GGCACAGACATCAACGGGCCCTGCAGAGGGCATCAGGCTCCTCACAAAGTACGTGGCCCA  
CAGTGGCATTGGAGACGGAGCGTGTCCCTCATCGTCTTGTGACGGATGGAGGCCACGG  
TCGGGAGACGCACACCCCTCAAGATCCTCAACAAACACCCGAGAGGCCCGAGGCCAAGTC  
TGCATCTTCACCATTGGCATCGGAAACGACGTGGACTTCAGGCTGCTGGAGAAACTGTCGCT  
GGAGAACTGTGGCCTCACACGGCGGTGCAAGGAGGAGGACGAGGCTCGCAGCTCATCG  
GGTTCTACGATGAAATCAGGACCCGCTCTCTGACATCCGATCGATTATCCCCCAGC  
TCAGTGGTGCAGGCCACCAAGACCCCTGTTCCCAACTACTTCAACGGCTGGAGATCATCAT  
TGCGGGAAAGCTGGTGACAGGAAGCTGGATCACCTGCACGTGGAGGTGACCCAGCAACA  
GTAAGAAATTCATCATCCTGAAGACAGATGTGCCTGTGCGGCCCTCAGAAGGCAGGGAAAGAT  
GTCACAGGAAGCCCCAGGCCCTGGAGGGCGATGGAGAGGGGACACCAACCACATCGAGCGTCT  
CTGGAGCTACCTCACCACAAAGGAGCTGCTGAGCTCTGGCTGCAAAGTACGATGAAACGG  
AGAAGGAGCGGCTGGCGAGCGGGCCAGGCCCTGGCTGTGAGCTACCGCTTCTCACTCCC  
TTCACCTCCATGAAGCTGAGGGGCCGGTCCCACGCATGGATGGCCTGGAGGAGGCCACGG  
CATGTCGGCTGCCATGGACCCGAACCGGTGGTGCAGAGCGTGCAGGAGCTGGCACGCAGC  
CAGGACCTTGCTCAAGAACCAACTCCGTCAAAAAAAACAAAACAAAACAAAAAAGA  
CATGGGAGAGATGGTGTGTTCTCCACCACCTGGGATACGA**TGA**GAAGATGGCCACCT  
GCAAGCCAGGAAGACGCCCTCACAGACACCATGTCTGCTGGCACCTGATCTGGACCTC  
CCAGCCTCCAGAACACTGTGAGAAATAATGTGTTTAAAGCTAAAAAAAAAAAAAAA  
AAAAAAAAAAAAAAA

## **FIGURE 22**

</usr/seqdb2/sst/DNA/Dnaseqs.min/ss.DNA44192

<subunit 1 of 1, 694 aa, 1 stop

<MW: 77400, PI: 9.54, NX(S/T): 6

MLLGLCLGLSLCVGSQEEAQSWGHSSEQDGLRVPRQVRLQLKTKPLMTEFSVKSTIIS  
RYAFTTVSCRMLNRASEDQDIEFQMQIPAAAFITNFTMLIGDKVYQGEITEREKSGDRVKE  
KRNKTTENGEKGTEIFRASAVIPSVDKAFFLSYEELLQRRLGKYEHSISVRPQQLSGRSL  
VDVNILESAGIASLEVLPLHNSRQRGSGRGEDDSGPPPSTVINQNETFANIIFKPTVVQQAR  
IAQNGILGDFIIRYDVNREQSIGDIQVLNGYFVHYFAPKDLPLPKNVVFVLDSSASMVGTK  
LRQTKDALFTILHDLRPQDRFSIIGFSNRIKVWKDHЛИSVPDSIRDGKVIHHMSPTGGTD  
INGALQRAIRLLNKVAHSGIGDRSVSLIVFLTDGKPTVGETHTLKILNNNTREAARGQVCIF  
TIGIGNDVDFRLLEKLSLENCGLTRRVHEEEDAGSQLIGFYDEIRTPLLSDIRIDYPSSVV  
QATKTLFPNYFNGSEIIIAGKLVDRKLDHLHVEVTASNKKFIILKTDVPVRPQKAGKDVTG  
SPRPGGDGEGDTNHIERLWSYLTTKELLSSWLQSDDEPEKERLRQRAQALAVSYRFLTPFTS  
MKLRGPVPRMDGLEEAHMSAAMGPEPVVQSVRGAGTQPGPLLKKPNSVKKQNKTKRHGR  
DGVFPLHHLGIR

**Signal sequence.**

amino acids 1-14

**N-glycosylation sites.**

amino acids 97-101, 127-131, 231-235, 421-425, 508-512, 674-678

**Glycosaminoglycan attachment sites.**

amino acids 213-217, 391-395

**N-myristoylation sites.**

amino acids 6-12, 10-16, 212-218, 370-376, 632-638, 638-644

## **FIGURE 23**

CGGACGCGTGCGGTGCCGACATGGCGAGTGTAGTGCTGCCGAGCGGATCCCAGTGTGCGGC  
GGCAGCGCGCGCGCGCGCCTCCCGGGCTCCGGCTTGCTGTTGCTCTTCTCCGCCGCGG  
CACTGATCCCCACAGGTGATGGCAGAATCTGTTACGAAAGACGTGACAGTGATCGAGGGA  
GAGGTTGCGACCATCAGTTGCCAAGTCAATAAGAGTGACGACTCTGTGATTCAAGCTACTGAA  
TCCCAACAGGCAGACCATTATTCAGGGACTTCAGGCCTTGAAGGCAGCAGGTTTCAGT  
TGCTGAATTTCTAGCAGTGAACCAAAGTATCATTGACAAACGTCTCAATTCTGATGAA  
GGAAGATACTTTGCCAGCTCTACCGATCCCCACAGGAAAGTTACACCAACCATCACAGT  
CCTGGTCCCACCACGTAATCTGATGATCGATATCCAGAAAGACACTGCGGTGGAAGGTGAGG  
AGATTGAAGTCAACTGCACTGCTATGCCAGCAAGCCAGCCACGACTATCAGGTGGTCAA  
GGGAACACAGAGCTAAAGGCAAATCGGAGGTGGAAGAGTGGTCAGACATGTACACTGTGAC  
CAGTCAGCTGATGCTGAAGGTGCACAAGGAGGACGATGGGTCCCAGTGATCTGCCAGGTGG  
AGCACCCCTGCGGTCACTGGAAACCTGCAGACCCAGCGGTATCTAGAAGTACAGTATAAGCCT  
CAAGTGCACATTAGATGACTTATCCTCTACAAGGCTTAACCCGGAAAGGGACGCGCTTGA  
GTTAACATGTGAAGCCATCGGGAAAGCCCCAGCCTGTGATGGTAACTTGGTGAGAGTCGATG  
ATGAAATGCCTCAACACGCCGTACTGTCTGGGCCAACCTGTTCATCAATAACCTAAACAAA  
ACAGATAATGGTACATACCGCTGTGAAGCTTCAAACATAGTGGGAAAGCTCACTCGGATTA  
TATGCTGTATGTATACGATCCCCCACAACATCCCTCCTCCCACAACAACCACCA  
CCACCACCACCACCAACCACCATCCTTACCATCATCACAGATTCCGAGCAGGTGAAGAAGGC  
TCGATCAGGGCAGTGGATCATGCCGTGATCGGTGGCGTGGCGGTGGTGGTGGTGGTGGTGGTGG  
GCTGTGCTTGCTCATCATTCTGGGCGCTATTTGCCAGACATAAGGTACATACTTCACTC  
ATGAAGCCAAGGAGCCGATGACCCAGCAGACGGAGACACAGCTATAATCAATGCAGAAGGA  
GGACAGAACAACTCCGAAGAAAAGAAAGAGTACTTCATCTAGATCAGCCTTTGTTCAAT  
GAGGTGTCCTTAACTGGCCCTATTAGATGATAAAGAGACAGTGATATTGG

## **FIGURE 24**

</usr/seqdb2/sst/DNA/Dnaseqs.min/ss.DNA39518  
<subunit 1 of 1, 440 aa, 1 stop  
<MW: 48240, pi: 4.93, NX(S/T): 7  
MASVVLPSGSQCAAAAAAAAPPGLLLLLFSAAALIPTGDGQNLFTKDVTVIEGEVATISC  
QVNKSDDSVIQLLNPNRQTIYFRDFRPLKDSRFQLLNFSSSELKVSLTNVSISDEGRYFCQL  
YTDPPQESYTTITVLVPPRNLMIDIQKDTAVEGEEIEVNCTAMASKPATTIRWFKGNTTELKG  
KSEVEEWSDMYTSQLMLKVHKEDDGVPVICQVEHPAVTGQLQTQRYLEVQYKPQVHIQMT  
YPLQGLTREGDALELTCEAIGKPQPVMVTWVRVDDEMPQHAVLSGPNLFINNLNKTNGTYR  
CEASNIVGKAHSDYMLYVYDPPTTIPPPTTTTTTTTTILTIITDSRAGEEGSIRAVDH  
AVIGGVVAVVFAMLCLLIILGRYFARHKGYFTHEAKGADDAADADTAIINAEGGQNNSEE  
KKEYFI

**Signal sequence.**

amino acids 1-36

**Transmembrane domain.**

amino acids 372-393

**N-glycosylation sites.**

amino acids 65-69, 99-103, 111-115, 163-167, 302-306, 306-310,  
430-434

**Tyrosine kinase phosphorylation sites.**

amino acids 233-240, 319-328

**N-myristoylation sites.**

amino acids 9-15, 227-233, 307-313, 365-371, 376-382, 402-408,  
411-417, 427-433, 428-432

## **FIGURE 25**

GGGGCGGGTGGACGCGACTCGAACGCAGTTGCTTCGGGACCCAGGACCCCCTGGGCCGA  
CCCGCCAGGAAAGACTGAGGCCGGCCTGCCCGCCGGCTCCCTGCGCCGCCGCCCTC  
CCGGGACAGAAGATGTGCTCCAGGGTCCCTCTGCTGCTGCCGCTGCTCCTGCTACTGCCCT  
GGGGCCTGGGTGCAAGGGTCCCCATCCGGCTGCCAGTGAGCCAGCCACAGACAGTCTTCT  
GCACTGCCGCCAGGGACCACGGTGCCCCGAGACGTGCCACCCGACACGGTGGGCTGTAC  
GTCTTGAGAACGGCATCACCATGCTGACGCAAGCAGCTTGCAGGCCCTGCCGGCTGCA  
GCTCCTGGACCTGTCACAGAACCGAGATGCCAGGCCCTGCCCTGCCGGCATCCTGGACACTGCCAACGTGGAG  
ACCTCAGGCCACAACAGCCTGCCCTGGGCCCTGGAGGCCAGCAGCTGGAGGCCACCTGTGATCCGAG  
GCGCTGCCGGCTGGCTGGCTGGGCTGCCAGCAGCTGGAGCGAGTGCCACCTGTGATCCGAG  
AACCTCCACGACCTGGATGTGTCGACAACCAGCTGGAGCGAGTGCCACCTGTGATCCGAG  
GCCCTCCGGGCCTGACGCCCTGCCGGCTGCCGGCAACACCCGATTGCCAGCTGCCGG  
GAGGACCTGCCGCCCTGGCTGCCCTGCCAGGAGCTGGATGTGAGCAACCTAACGCCCTGCC  
CCTGCCCTGGCGACCTCTGGGCCCTTCCCCGCCCTGCCGGCTGCTGCCAGCTGCCGCCAAC  
CCTTCAACTGCGTGTGCCCTGAGCTGGTTGGCCCTGGGTGCCAGAGGCCACGTCA  
CTGGCCAGCCCTGAGGAGACGCCGCTGCCACTTCCGCCAACAGCAGCTGCCGGCTGCTCCT  
GGAGCTTGAACACGCCACTTGGCTGCCAGCCACCCACAGCCACAGTGCCACCCA  
CGAGGCCCGTGGTGCAGGGAGCCCACAGCCTGTCTTAGCTTGGCTCCTACCTGGCTTAGC  
CCCACAGGCCGCCACTGAGGCCAGGCCCTCCACTGCCAACCGACTGTAGGGCC  
TGTCCCCCAGCCCCAGGACTGCCACCGTCCACCTGCCCTAATGGGGCACATGCCACCTGG  
GGACACGGCACCACTGGCGTGTGCCCCGAAGGCTCACGGGCCCTGTACTGTGAGAGC  
CAGATGGGGCAGGGGACACGCCAGGCCACACCAGTCAGCCGAGGCCACCGTCC  
GACCCCTGGCATCGAGCCGTGAGCCCCACCTCCCTGCCGTGGGCTGCCAGCGCTACCTCC  
AGGGGAGCTCCGTGCACTCAGGAGCCTCCGTCTCACCTATGCAACCTATGGGCCCTGAT  
AAGCGGCTGGTACGCTGCCACTGCCCTCGCTGAGTACACGGTACCCAGCTGCG  
GCCCAACGCCACTTACTCCGTCTGTGTCATGCCCTTGGGGCCGGCGGGTGCCGGAGGGCG  
AGGAGGCCTGCCGGAGGCCATACACCCCAAGCCGTCCACTCCAACCACGCCAGTCACC  
CAGGCCCGAGGGCAACCTGCCCTCATTGCCGCCCTGCCGCCGGTGTCCCTGG  
CGCGCTGGCTGCCGTGGGAGGCCACTGTGAGGAGCTGGGCGGGGGCCATGCCAGCAGCG  
CTCAGGACAAAGGGCAGGTGGGGCAGGGCTGGGCCCTGGAACACTGGAGGGAGTGAAGGTC  
CCCTTGGAGCCAGGCCGAAGGCAACAGAGGGCGGTGGAGAGGCCCTGCCAGCGGGCTGA  
GTGTGAGGTGCCACTCATGGCTTCCAGGGCTGCCCTCCAGTCACCCCTCACGCAAAGC  
CCTACATCTAAAGCCAGAGAGAGACAGGGCAGCTGGGCCGGCTCTCAGCCAGTGAGATGGC  
CAGCCCCCTCCGTGCCACACCAAGTAAGTTCTCAGTCCCAACCTCGGGATGTGCA  
CAGGGCTGTGACCAAGCTGGGCCCTGTTCCCTGTGACCTCGGTCTCTCATCTGTGAG  
ATGCTGTGGCCCAGCTGACGAGGCCATAACGTCCCCAGAACCGAGTGCCATGAGGACAGTGT  
CCGCCCTGCCCTCCGCAACGTGCACTCCCTGGCACGGCGGGCCCTGCCATGTGCTGGTAAC  
GCATGCCCTGGGCCCTGCTGGCTCTCCACTCCAGGCCAGGCCCTGGGGCCAGTGAAGGAAG  
CTCCCGGAAAGAGCAGAGGGAGAGCGGGTAGGCGGCTGTGACTCTAGTCTGGCC  
AAGCGAAGGAACAAAAGAAACTGGAAAGGAAGATGCTTAGGAACATGTTTGCTTTAA  
AATATATATATTTATAAGAGATCCTTCCATTATTCTGGAAAGATGTTTCAAAC  
AGAGACAAGGACTTGGTTTGTAAAGACAAACGATGATGATGAAGGCCTTTGTAAGAAAAA  
ATAAAAAAAAAA

## **FIGURE 26**

</usr/seqdb2/sst/DNA/Dnaseqs.min/ss.DNA44804

<subunit 1 of 1, 598 aa, 1 stop

<MW: 63030, pi: 7.24, NX(S/T): 3

MCSRVPLLPPLLLALGPGVQGCPSCQCSPQTVFCTARQGTTVPRDVPPDTVGLYVFEN  
GITMLDASSFAGLPGQLLDSLQNQIASLRLPRLLLLDLSHNSLLALEPGIILDTANVEALRL  
AGLGLQQLEGLFSRLRNHLHLDVSDNQLERVPPVIRGLRGLTRLRLAGNTRIAQLRPEDLA  
GLAALQELDVSNLSQLAPGDLSGLFPRLRLLAAARNPFNCVCPLSWFGPWVRESHVTLASP  
EETRCHFPPKNAGRLLLELDYADFGCPATTTATVPTTRPVVREPTALSSSLAPTWLSPTAP  
ATEAPSPPSTAPPTVGPVPQPQDCPPSTCLNGGTCHLGTRHHHLACLCPEGFTGLYCESQMGQ  
GTRPSPTPVTPRPPRSLTGIEPVSPTRLVGLQRYLQGSSVQLRSRLTYRNLSGPDKRLV  
TLRLPASLAEYTVTQLRPNATYSVCVMPLGPGRVPEGEEACEAHTPPAVHSNHAPVTQARE  
GNLPLLIAPALAAVLLAALAAVGAAVCVRGRAMAAAQDKGQVGPAGPLELEGVKVPLEP  
GPKATEGGEALPSGSECEVPLMGPFGPGLQSPLHAKPYI

**Signal sequence.**

amino acids 1-23

**Transmembrane domain.**

amino acids 501-522

**N-glycosylation sites.**

amino acids 198-202, 425-429, 453-457

**Tyrosine kinase phosphorylation site.**

amino acids 262-270

**N-myristoylation sites.**

amino acids 23-29, 27-33, 112-118, 273-279, 519-525, 565-571

**Prokaryotic membrane lipoprotein lipid attachment site.**

amino acids 14-25

**EGF-like domain cysteine pattern signature.**

amino acids 355-367

**Leucine zipper pattern.**

amino acids 122-144, 194-216

## **FIGURE 27**

GGCACTAGGACAACCTTCTTCCCTCTGACCACGCCGTACCCCTACCGCCCCGCCACC  
TCCTTGCTACCCACTCTGAAACCACAGCTGTTGGCAGGGTCCCCAGCT**CATGCC**AGCCTC  
ATCTCCTTCTGCTAGCCCCAAAGGCCTCCAGGCAACATGGGGGCCAGTCAGAGAGC  
CGGCACACTCTCAGTTGCCCTGTTGAGTTGGGGCAGCTCTGGGGCCGTGGCTTGCC  
ATGGCTCTGCTGACCCAAACAAACAGAGCTGCAGAGCCTCAGGAGAGAGGTGAGCCGGCTGCA  
GGGGACAGGAGGCCCTCCCAGAATGGGAAGGGTATCCCTGGCAGAGTCTCCGGAGCAGA  
GTTCCGATGCCCTGGAAGCCTGGGAGAATGGGAGAGATCCCGAAAAGGAGAGCAGTGCTC  
ACCCAAAAACAGAAGAACAGCACTCTGTCCTGCACCTGGTCCCATTACGCCACCTCAA  
GGATGACTCCGATGTGACAGAGGTGATGTGGCAACCAGCTTAGCGTGGAGAGGCCTAC  
AGGCCAAGGATATGGTGTCCGAATCCAGGATGCTGGAGTTATCTGCTGTAGCCAGGTC  
CTGTTCAAGACGTGACTTCACCATGGTCAGGTGGTCTCGAGAAGGCCAAGGAAGGCA  
GGAGACTCTATTCCGATGTATAAGAAGTATGCCCTCCCACCCGGACCGGGCTACAACAGCT  
GCTATAGCGCAGGTGTCTCCATTACACCAAGGGATATTCTGAGTGTCAATAATCCCCGG  
GCAAGGGCGAAACTTAACCTCTCCACATGGAACCTTCTGGGTTGTGAAACTG**TGA**TT  
GTGTTATAAAAGTGGCTCCAGCTTGGAAAGACCAGGGTGGTACATACTGGAGACAGCCAA  
GAGCTGAGTATAAAGGAGAGGAAATGTGCAGGAACAGAGGCATCTTCTGGGTTGGCTC  
CCCGTTCTCACTTTCCCTTTCATTCCCACCCCTAGACTTGTATTACGGATATCTTG  
CTTCTGTTCCCCATGGAGCTCCG

## **FIGURE 28**

</usr/seqdb2/sst/DNA/Dnaseqs.min/ss.DNA52722

<subunit 1 of 1, 250 aa, 1 stop

<MW: 27433, PI: 9.85, NX(S/T): 2

MPASSPFL LAPKGPPGNMGGPVREPALSVALWLSWGAALGAVACAMALLTQQTELQSLRREV  
SRLQGTGGPSQN GEGYPWQSLPEQSSDALEAWENGERSRKRRAVLTQKQKKQHSQLHLVPIN  
ATSKDDSDVTEVMWQPALRRGRGLQAQGYGVRIQDAGVYLLYSQVLFQDVTFMGQVVSREG  
QGRQETLFRCIRSMPSHPDRAYNSCYSAGVFHLHQGDILSVII PRARAKLNLSPHGTFLGFVKL

**Signal sequence.**

amino acids 1-40

**N-glycosylation site.**

amino acids 124-128

**Tyrosine kinase phosphorylation site.**

amino acids 156-164

**N-myristoylation site.**

amino acids 36-42, 40-46, 179-185, 242-248

**Prokaryotic membrane lipoprotein lipid attachment site.**

amino acids 34-45

## **FIGURE 29**

CACTTCTCCCTCTTCCTTACTTCGAGAAACCGCGCTCCGCTCTGGTCGCAGAGAC  
CTCGGAGACCGCGCCGGGAGACGGAGGTGCTGTGGTGGGGGACCTGTGGCTGCTCGTA  
CCGCCCCCCCACCCTCCTCTGCACTGCCGTCCGGAAAGACCTTTCCCCTGCTCTGTT  
TCCTTCACCGAGTCTGTGCATGCCCGGACCTGGCGGGAGGAGGCTTGGCGGGGGAGA  
TGCTCTAGGGCGCGGGAGGAGCGGCCGGAGGAGGGCCGGCAGGAAGAAG**ATGGC**  
TCCCGTGGACAGGGACTCTGCTGGCGTACTGCCTGCTCCTGCCTTGCCCTTGCCTGG  
CCTGAGTCGTGTGCCCATGTCAGGGGAACAGCAGGAGTGGGAGGGACTGAGGAGCTGC  
CGTCGCCTCCGGACCAGGCCATGCCGAGAGGGCTGAAGAACAAACATGAAAATACAGGCCAGTCAG  
GACCAGGGCTCCCTGCTTCCCGTGCTGCGCTGCTGTGACCCGGTACCTCCATGTACCC  
GGCGACGCCGTGCCCATGCAACATCACTATCTGAAAGGGAGAAGGGTGACCGCGGAG  
ATCGAGGCCTCCAAGGGAAATATGGCAAAACAGGCTCAGCAGGGCCAGGGCCACACTGGA  
CCCAAAGGGCAGAAGGGCTCCATGGGGCCCTGGGGAGCGGTGCAAGAGCCACTACGCCGC  
CTTTTCGGTGGGCCGAAGAACGCCATGCAACAGCAACCACTACTACCAGACGGTGTACCG  
ACACGGAGTTCGTGAACCTCTACGACCACTCAACATGTTCACCGGCAAGTCTACTGCTAC  
GTGCCCGGCCTCTACTTCTCAGCCTCAACGTGACACCTGGAACCCAGAAGGAGACCTACCT  
GCACATCATGAAGAACGAGGAGGAGGTGGTGTACCGGCAGGTGGGACCGCAGCA  
TCATGCAAAGCCAGGCCATGCTGGAGCTGCGAGAGCAGGACCAAGGTGTGGTACGCC  
TACAAGGGCGAACGTGAGAACGCCATCTCAGCGAGGAGCTGGACACCTACATCAC  
TGGCTACCTGGTCAAGCACGCCACCGAGCCCT**TAG**CTGGCCGCCACCTCCTTCTCGCC  
ACCTTCCACCCCTGCGCTGTGCTGACCCACCGCCTTCCCCGATCCCTGGACTCCGACTC  
CCTGGCTTGGCATTCACTGAGACGCCATGCAACACAGAAAGCCAAGCGATCGGTGCTCC  
CAGATCCCGCAGCCTCTGGAGAGAGCTGACGGCAGATGAAATCACCAAGGGCGGGCACCCGC  
GAGAACCCCTGGGACCTTCCCGGCCCTCTGCAACACATCCTCAAGTGAACCCGCACGGC  
GAGACGCCGGTGGCGCAGGGCGTCCAGGGTGGCACCACGGCTCCAGTCCTGGAAATA  
ATTAGGCAAATTCTAAAGGTCTAAAAGGAGCAAAGTAAACCGTGGAGGACAAAGAAAAGGG  
TTGTTATTTGTCTTCCAGCCAGCCTGCTGGCTCCAAGAGAGAGGGCTTTCAAGTTGAG  
ACTCTGCTTAAGAGAACATCCAAAGTTAAAGCTCTGGGTCAAGGGAGGGCCGGGGCAGG  
AAACTACCTCTGGCTTAATTCTTTAAGCCACGTAGGAACCTTCTGAGGGATAGGTGGACC  
CTGACATCCCTGTGGCCTGCCAAGGGCTCTGCTGGTCTTCTGAGTCACAGCTGCGAGGT  
GATGGGGCTGGGCCAGGGCGTCAGCCTCCCAGAGGGACAGCTGAGCCCCCTGCCTTGGC  
TCCAGGTTGGTAGAACGCCAGGGCTCCTGACAGTGGCCAGGGACCCCTGGTCCCCCA  
GCCCTGCAGATGTTCTATGAGGGCAGAGCTCCTGGTACATCCATGTTGCTGCTCTGCTCC  
ACCCCTGTGCCACCCAGAGCCCTGGGGGTGGTCTCCATGCCCTGGCACCCTGGCATCGGCT  
TTCTGTGCCGCCCTCCACACAAATCAGCCCCAGAAGGCCCCGGGCTTGGCTTCTGTTTT  
TATAAAACACCTCAAGCAGCACTGCAGTCTCCATCTCCTCGTGGCTAAGCATACCGCTT  
CCACGTGTGTTGGTGGCAGCAAGGCTGATCCAGACCCCTCTGCCCTACTGCCCT  
CATCCAGGCCTCTGACCAAGTAGCCTGAGAGGGCTTTCTAGGCTTCAGAGCAGGGAGAG  
CTGGAAGGGCTAGAAAGCTCCGCTTGTCTGTTCTCAGGCTCTGTGAGCCTCAGTCCTG  
AGACCAGAGTCAAGAGGAAGTACACGTCCAAATACCCGTGTCAGGATTCACTCTCAGGAGC  
TGGGTGGCAGGAGAGGCAATAGCCCCCTGTGGCAATTGCAAGGACAGCTGGAGCAGGGTGTGCG  
GTGTCTCCACGGTGTCTCGCCCTGCCATGCCACCCAGACTCTGATCTCAGGAACCCC  
ATAGCCCCCTCTCCACCTCACCCATGTTGATGCCAGGGTCACTCTGCTACCCGCTGGGCC  
CCCAAACCCCCGCTGCCCTCTTCCCTCCCCCATCCCCACCTGGTTTGACTAATCCTGC  
TTCCCTCTGGGCTGGCTGCCGGATCTGGGTCCCTAAGTCCCTCTCTTAAAGAACCTT  
CTGCGGGTCAGACTCTGAAGCCAGTTGCTGTGGCGTGCCGGAAGCAGAGGCCACACTC  
GCTGCTTAAGCTCCCCAGCTCTTCCAGAAAACATTAAACTCAGAATTGTGTTTCAA

## **FIGURE 30**

></usr/seqdb2/sst/DNA/Dnaseqs.min/ss.DNA41234

><subunit 1 of 1, 281 aa, 1 stop

><MW: 31743, pI: 6.83, NX(S/T): 1

MGSRGQGLLLAYCLLLAFASGLVLSRVPHVQGEQQEWEGTEELPSPPDHAERAEEQHEKYRP  
SQDQGLPASRCLRCCDPGTSMYPATAVPQINITILKGEKGDRGDRGLQGKYGKTGSAGARGH  
TGPKGQKGSMGAPGERCKSHYAAFSGRKKPMHSNHYYQTVIFDTEFVNLYDHFNMF TGKFY  
CYVPGLYFFSLNVHTWNQKETYLHIMKNNEEVVILFAQVGDRSIMQSQSLMELREQDQVWV  
RLYKGERENAIFSEELDTYITFSGYLVKHATEP

**Signal sequence.**

amino acids 1-25

**N-glycosylation site.**

amino acids 93-97

**N-myristoylation sites.**

amino acids 7-13, 21-27, 67-73, 117-123, 129-135

**Amidation site.**

amino acids 150-154

**Cell attachment sequence.**

amino acids 104-107

## **FIGURE 31**

GCGGAGCATCCGCTCGGGTCCTCGCCGAGACCCCCCGCGGGATTGCCGGTCTTCCCGCG  
GCGCGACAGAGCTGCCTCGCACCTGGATGGCAGCAGGGCGCCGGGTCTCTGACGCCA  
GAGAGAAATCTCATCATCTGTGCAGCCTCTAAAGCAAACATAAGACCAAGAGGGAGGATTAT  
CCTTGACCTTGAAAGACCAAAACTAAACTGAAATTAAAATGTTCTCGGGGGAGAAGGGAG  
CTTGACTTACACTTGTAATAATTGCTCCTGACACTAAGGCTGTCTAGTCAGAATT  
GCCTCAAAAAGAGTCTAGAAGATGTTGTCATTGACATCCAGTCATCTCTTCTAAGGGAATC  
AGAGGCAATGAGCCC GTATATACTCAACTCAAGAAGACTGCATTAATTCTGCTGTTCAAC  
AAAAAACATATCAGGGACAAAGCATGTAACTTGATGATCTCGACACTCGAAAAACAGCTA  
GACAACCCAAC TGCTACCTATTTCTGTCCAACGAGGAAGCCTGTCATTGAAACCAGCA  
AAAGGACTTATGAGTTACAGGATAATTACAGATTTCATCTTCAAGCAGGAAATTGCCAAG  
CCAAGAGTTACCCCAGGAAGATTCTCTTACATGGCAATTTCACAAGCAGTCACCCCC  
TAGCCC ATCATCACACAGATTATTCAAAGCCCACCGATATCTCATGGAGAGACACACTTTCT  
CAGAAGTTGGATCCTCAGATCACCTGGAGAAACTATTAAAGATGGATGAAGCAAGTGCCA  
GCTCCTTGCTTATAAGGAAAAGGCCATTCTCAGAGTTACAATTTCCTCTGATCAAGAAA  
TAGCTCATCTGCTGCC GAAAATGTGAGTGCGCTCCAGCTACGGTGGCAGTGCTTCTCCA  
CATACCACCTCGGCTACTCCAAAGCCCGCCACCCTCTACCCACCAATGCTCAGTGACACC  
TTCTGGACTTCCCAGCCACAGCTGGCCACCACAGCTCCACCTGTAACCAGTCACCTCTC  
AGCCTCCCAGACCCTCATTCTACAGTTTACACGGGCTGCGGCTACACTCCAAGCAATG  
GCTACAACAGCAGTTCTGACTACCACCTTCAGGCACCTACGGACTCGAAAGGCAGCTAGA  
AACCATACCGTTACAGAAATCTCAA CTTAACTTTGAACACAGGGAAATGTGTATAACCCTA  
CTGCACTTCTATGTCAAATGTGGAGTCTTCCACTATGAATAAAACTGCTTCTGGGAGGT  
AGGGAGGCCAGTCCAGGCAGTTCTCCAGGGCAGTGTCCAGAAAATCAGTACGGCCTTCC  
ATTGAAAAATGGCTTCTTATCGGGTCCCTGCTTTGGTGTCTGTTCTGGTGTAGGCC  
TCGTCCCTCTGGGTAGAATCCTTCGGAATCACTCCGCAAGGAAACGTTACTCAAGACTGGAT  
TATTTGATCAATGGGATCTATGTGGACATCTAAGGATGGA ACTCGGTGTCTCTTAATTCTT  
TAGTAACCAGAAGCCAAATGCAATGAGTTCTGCTGACTTGCTAGCTTAGCAGGAGGTTG  
TATTTGAAGACAGGAAATGCCCTCTGCTTTCTTGTGTTCTTTGGAGACAGAGTCTT  
GCTCTGTTGCCAGGCTGGAGTGCAGTAGCACGATCTGGCTCTCACCGAACCTCCGTCTC  
CTGGGTTCAAGCGATTCTCCTGCCTCAGCCTCCTAAGTATCTGGGATTACAGGCATGTGCCA  
CCACACCTGGGTGATTTGTATTTAGTAGAGACGGGTTTACCATGTTGGTCAGGCTG  
GTCTCAAACCTGACCTAGTGATCCACCCCTCTGGCCTCCAAAGTGCTGGGATTACAGG  
CATGAGCCACCACAGCTGGCCCCCTCTGTTTATGTTGGTTTGAGAAGGAATGAAGTG  
GGAACCAAATTAGTAATTGGGTAATCTGTCTAAATATTAGCTAAAACAAAGCTCT  
ATGTAAAGTAATAAAAGTATAATTGCCATATAAAATTCAAACCTGGCTTTATGC  
GAAACAGGTTAGGACATCTAGGTTCCAATTCAATTCACTTCTGGTCCAGATAAAATCAAC  
TGTTTATATCAATTCTAATGGATTGCTTTCTTTATATGGATTCCCTTAAACTTATT  
CCAGATGTAGTTCTCCAATTAAATATTGAATAATCTTTGTTACTCAA

## FIGURE 32

></usr/seqdb2/sst/DNA/Dnaseqs.min/ss.DNA45410

><subunit 1 of 1, 431 aa, 1 stop

><MW: 46810, pI: 6.45, NX(S/T): 6

MFFGEGSLTYTLVIICFLTLRLSASQNCLKSLEDVVIDIQSSLKGIRGNEPVYTSTQED  
CINSCCSTKNISGDKACNLMIFDTRKTARQPNCYLFFCPNEEACPLPAKGLMSYRIITDFP  
SLTRNLPSQELPQEDSLLHGQFSQAVTPLAHHTDYSKPTDISWRDTLSQKFGSSDHLEKLF  
KMDEASAQLLAYKEKGHSQSSQFSSDQEIAHLLPENVSALPATVAVASPHTTSATPKPATLL  
PTNASVTPSGTSQPQLATTAPPVTTVTSQPPTTLISTVFTRAATLQAMATTAVLTTTFQAP  
TDSKGSLETIPFTEISNLTLNTGNVYNPTALSMSNVESSTMNKASWEGREASPGSSSQGSV  
PENQYGLPFEKWLLIGSLLFGVLFLVIGLVLLGRILSESLRRKRYSRLDYILINGIYVDI

**Signal sequence.**

amino acids 1-25

**Transmembrane domain.**

amino acids 384-405

**N-glycosylation sites.**

amino acids 72-76, 222-226, 251-255, 327-331, 352-356

**cAMP- and cGMP-dependent protein kinase phosphorylation site.**

amino acids 415-419

**Tyrosine kinase phosphorylation site.**

amino acids 50-57

**N-myristoylation sites.**

amino acids 4-10, 48-54, 315-321

## **FIGURE 33**

GGGGCACCTGGAAGATGCGCCCATTGGCTGGTGGCCTGCTCAAGGTGGTGGTGGTCTTC  
GCCTCCTTGTGTGCCCTGGTATTCGGGGTACCTGCTCGCAGAGCTCATTCCAGATGCACCCCT  
GTCCAGTGCTGCCTATAGCATCCGCAGCAGTCGGGAGAGGCCTGCCTCAAAGCTCCAGTCC  
CCAAAAGGCAAAATGTGACCACTGGACTCCCTGCCATCTGACACCTATGCCTACAGGTTA  
CTCAGCGGAGGTGGCAGAACAGCAAGTACGCCAAATCTGCTTGAGGATAACCTACTTATGGG  
AGAACAGCTGGAAATGTTGCCAGAGGAATAAACATTGCCATTGTCAACTATGTAACTGGGA  
ATGTGACAGCAACACGATGTTGATATGTATGAAGGCGATAACTCTGGACCGATGACAAAG  
TTTATTCAAGAGTGCTGCCAAATCCCTGCTCTCATGGTACCTATGACGACGGAAGCAC  
AAGACTGAATAACGATGCCAAGAACGCCATAGAACGACTTGGAAAGTAAAGAAATCAGGAACA  
TGAAATTCAAGGTCTAGCTGGTATTTATTGCAGCAAAAGGCTTGGAACTCCCTCCGAAATT  
CAGAGAGAAAAGATCAACCACCTGATGCTAAGAACACAGATATTCTGGCTGGCCTGCAGA  
GATCCAGATAGAACGGCTGCATACCCAAAGAACGAAGCTGACACTGCAGGGCCTGAGTAAAT  
GTGTTCTGTATAACAAATGCAGCTGGAATCGCTCAAGAATCTTATTGCTAAATCCAACA  
GCCCATATTGATGAGTATTTGGTTGTTGAAACCAATGAACATTGCTAGTTGTATCA  
AATCTTGGTACGCAGTATTTATACCAAGTATTTATGTTAGTGAAGATGTCAATTAGCAGGA  
AACTAAAATGAATGGAAATTCTAAAAAAAAAAAAA

DRAFT - 09/09/2014

## **FIGURE 34**

></usr/seqdb2/sst/DNA/Dnaseqs.min/ss.DNA46777

><subunit 1 of 1, 235 aa, 1 stop

><MW: 25982, pI: 9.09, NX(S/T): 2

MRPLAGGLLKVVFVVFASLCAWYSGYLLAELIPDAPLSSAAYSIRSIGERPVLKAPVPKRQK  
CDHWTPCPSDTYAYRLLSGGGRSKYAKICFEDNLLMGEQLGNVARGINIAIVNYVTGNVTAT  
RCFDMDYEGDNSGPMTKFIQSAAPKSLLFMVTYDDGSTRLNNDAKNAIEALGSKEIRNMKFRS  
SWVFIAAKGLELPSEIQREKINHSDAKNNRYSGWPAEIQIEGCIPKERS

**Signal sequence.**

amino acids 1-20

**N-glycosylation sites.**

amino acids 120-124, 208-212

**Glycosaminoglycan attachment site.**

amino acids 80-84

**N-myristoylation sites.**

amino acids 81-87, 108-114, 119-125